

What is claimed is:

- 5 1. A liquid crystal display device having a liquid crystal display panel, said liquid crystal display panel comprising:  
a plurality of pixels which are disposed in a matrix having rows and columns and each of which has at least a thin film transistor (TFT) and a pixel electrode;  
10 a plurality of gate signal lines which extend from a gate signal input portion disposed along a side of said liquid crystal display panel and each of which is coupled with said TFT's in a row of said matrix; and  
auxiliary capacitor portions each additionally coupled  
15 with a pixel electrode of one of said pixel, the width of said gate signal line becoming narrower and thereby capacitance of said auxiliary capacitor portions becoming smaller as the distance from said gate signal input portion becomes larger.
- 20 2. A liquid crystal display device as set forth in claim 1, further comprising a backlight portion for illuminating said liquid crystal display panel from the backside thereof, luminance of backlight by said backlight portion becomes lower as the distance from said gate signal input portion becomes  
25 larger.
- 30 3. A liquid crystal display device as set forth in claim 2, wherein an area of an aperture portion of said pixel becomes larger as the distance from said gate signal input portion becomes larger.

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wherein said backlight portion comprises an elongated backlight source disposed along the side of said liquid crystal display panel which is perpendicular to the side where said gate signal input portion is disposed.

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9. A liquid crystal display device comprising:

(a) a liquid crystal display panel having:

a plurality of pixels which are disposed on a TFT substrate in a matrix having rows and columns and each of which has at least a thin film transistor (TFT) and a pixel electrode;

a plurality of gate signal lines which extend on said TFT substrate from a gate signal input portion disposed along a side of said liquid crystal display panel and each of which is coupled with said TFT's in a row of said matrix;

auxiliary capacitor portions each additionally coupled with a pixel electrode of one of said pixel, the width of said gate signal line becoming narrower and thereby capacitance of said auxiliary capacitor portions becoming smaller as the distance from said gate signal input portion becomes larger; and

an opposing substrate which opposes to said TFT substrate while keeping a small gap therebetween, said small gap being filled with liquid crystal; and

(b) a backlight portion for illuminating said liquid crystal display panel from the backside thereof, luminance of backlight by said backlight portion becomes lower as the distance from said gate signal input portion becomes larger.

10. A liquid crystal display device as set forth in claim 9, wherein capacitance of each of said auxiliary capacitor portions

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1. The first part of the paper is devoted to a review of the literature on the topic. It starts with a general overview of the field, followed by a more detailed discussion of the specific issues at hand. The author then presents his own findings, which are based on a series of experiments. These findings are then compared with the results of previous studies, and the author discusses the implications of his work. Finally, the paper concludes with a summary of the main points and some suggestions for future research.